STATE OF MARYLAND

DHMH

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February 11, 2011

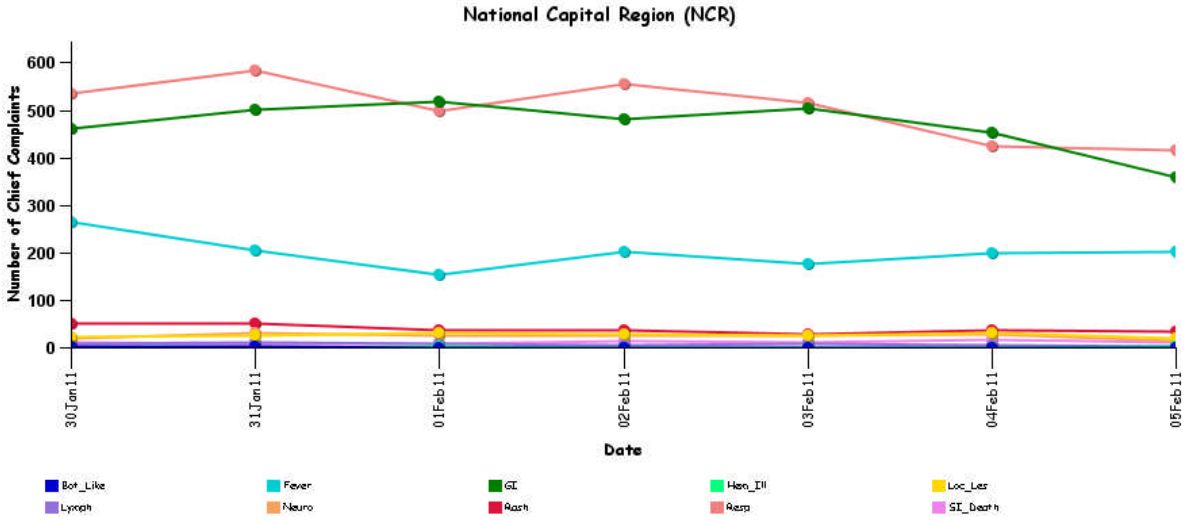
Public Health & Emergency Preparedness Bulletin: # 2011:05 Reporting for the week ending 02/05/11 (MMWR Week #05)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

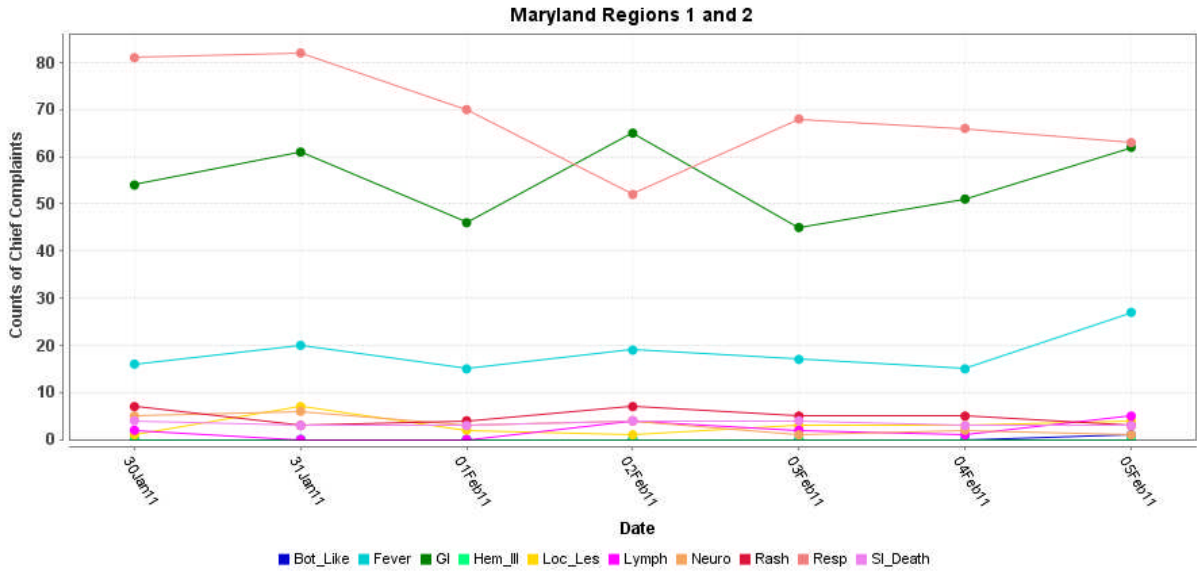
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

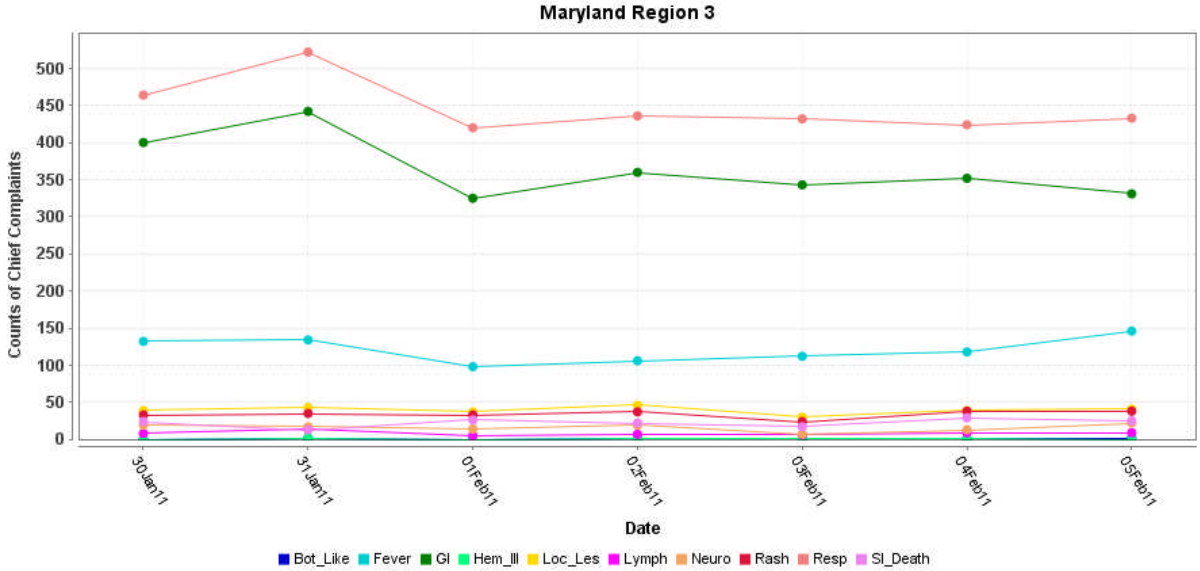


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

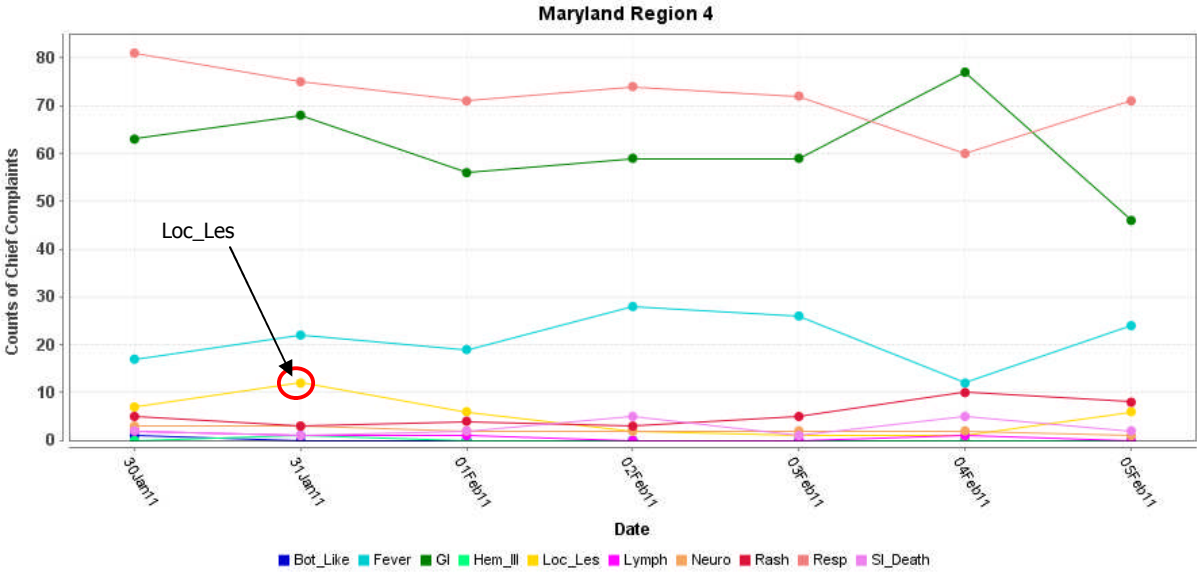
MARYLAND ESSENCE:



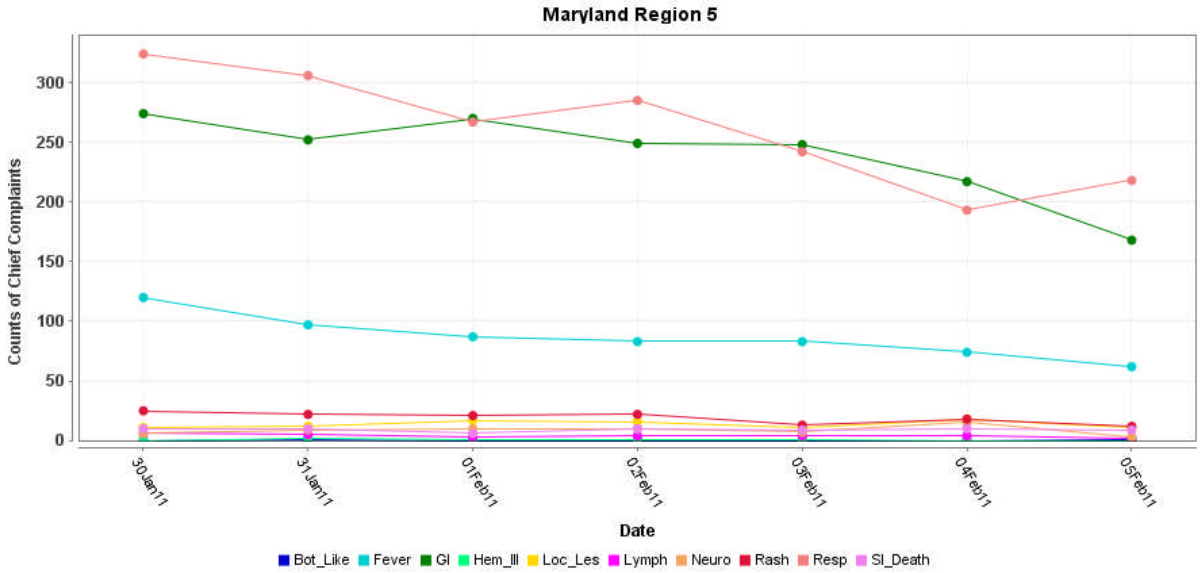
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



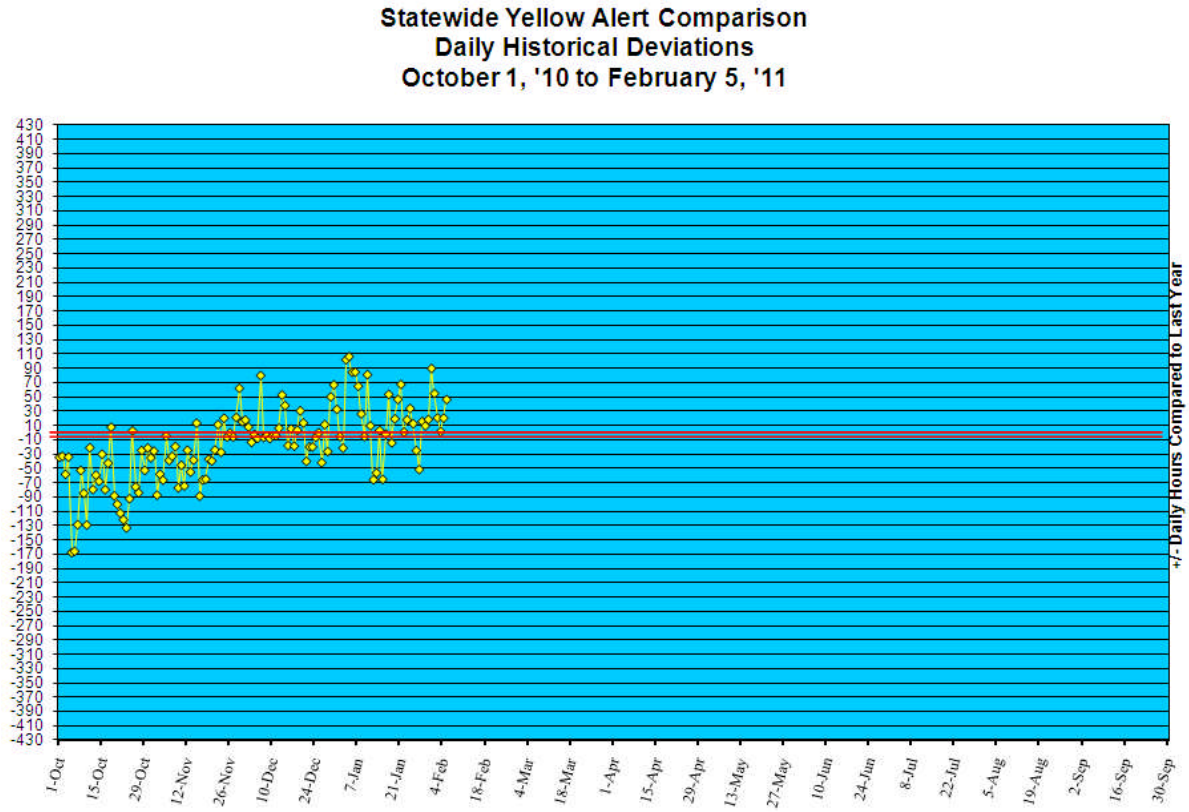
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/10.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in December 2010 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (January 30 – February 05, 2011):	8	0
Prior week (January 23 – January 29, 2011):	5	0
Week#5, 2010 (January 31 – February 06, 2010):	12	0

Eighteen outbreaks were reported to DHMH during MMWR Week 5 (January 30 – February 05, 2011):

7 Gastroenteritis outbreaks

3 outbreaks of GASTROENTERITIS in Nursing Homes

3 outbreaks of GASTROENTERITIS in Assisted Living Facilities

1 outbreak of GASTROENTERITIS in a Hospital

10 Respiratory illness outbreaks

2 outbreaks of INFLUENZA in Nursing Homes

2 outbreaks of INFLUENZA in Assisted Living Facilities

1 outbreak of INFLUENZA in a Hospital

1 outbreak of INFLUENZA/PNEUMONIA in a Nursing Home

1 outbreak of INFLUENZA/PNEUMONIA in an Adult Daycare Center

1 outbreak of ILI in a Nursing Home

1 outbreak of ILI in a School

1 outbreak of PNEUMONIA in a Nursing Home

1 Other outbreak

1 outbreak of CONJUNCTIVITIS in a School

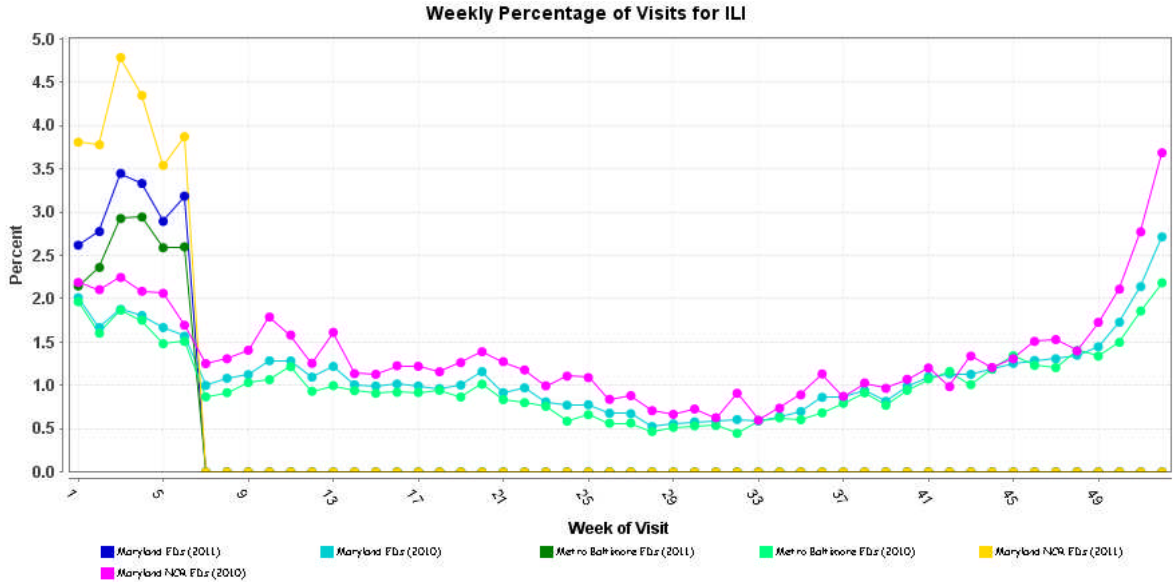
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity was WIDESPREAD for Week 5.

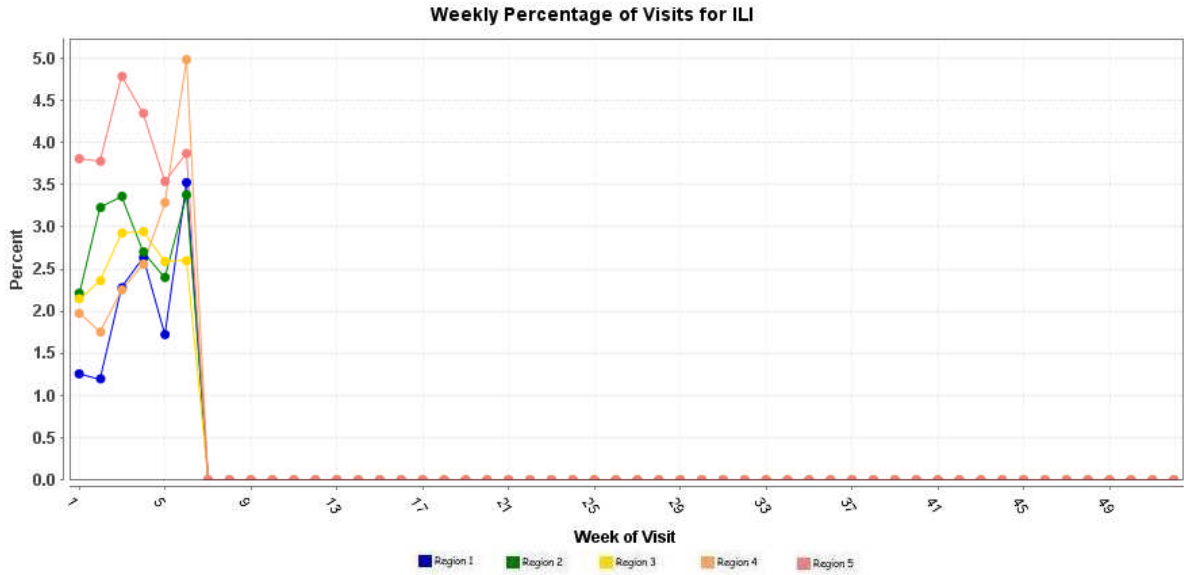
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



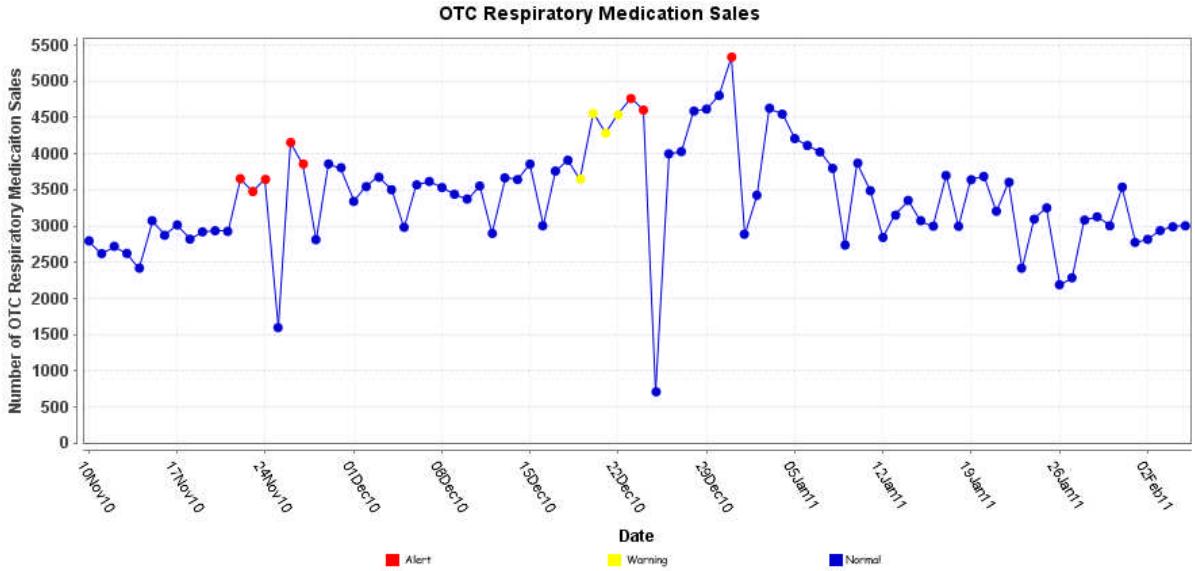
* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2011 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of February 02, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 519, of which 306 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA, POULTRY (BANGLADESH): 04 February 2011, District livestock officials destroyed around 7000 avian influenza (bird flu) infected hens of [a farm] at Bogadia village in KishoreganjSadar upazila [Dhaka division] yesterday [3 Feb 2011]. Informed that some hens of the farm died of unknown diseases during the last few days, Dr Bahadur Ali, veterinary surgeon of district livestock office, visited the spot. After primary examination of some collected samples, he detected those as affected by bird flu. The report was sent to Dhaka central office from where a letter confirming the case as bird flu came on Wednesday [2 Feb 2011] night. District Livestock Officer Nousad Hossain in presence of administration officers and police personnel arranged destroying the hens of the farm yesterday [3 Feb 2011] morning.

AVIAN INFLUENZA, POULTRY (JAPAN): 04 February 2011, The Oita prefectural government finished culling about 13,000 chickens at a poultry farm and a meat processing center on Thu [3 Feb 2011] after becoming the 5th Japanese prefecture to be hit by avian influenza this winter [2010-2011]. About 110 people, including animal doctors and prefectural government officials, culled and buried about 8,100 chickens from Wednesday night [2 Feb 2011] at the poultry farm in Oita city, while an additional 100 people joined the task of disinfecting the area. The approximately 5,000 other chickens were culled at a meat processing center in Usa as around 2000 chickens had been brought to it from the infected farm. The prefecture imposed a ban on the transport of chickens and eggs within a 10-km [6 mi] radius of the farm and conducted on-site inspections at 10 poultry farms within the area, each holding more than 100 chickens. The officials said no suspected infections were found in visual examinations and added that they will wait to see the results of blood tests and other exams expected to come out on Saturday night [5 Feb 2011] or later. Oita Prefecture confirmed Wed [2 Feb 2011] the 11th bird flu outbreak this season in the country after 38 chickens were reported dead. The southwestern prefecture borders Miyazaki Prefecture, where more than 700,000 chickens have been killed with the flu spreading to 7 farms in 6 municipalities. Elsewhere, Shimane, Aichi, and Kagoshima prefectures have so far managed to contain infections to one farm each since the season's 1st outbreak in Japan was found in Shimane last November [2010].

AVIAN INFLUENZA, POULTRY (INDONESIA): 03 February 2011, A bird flu (H5N1) outbreak has occurred in Indonesia's Jambi province, triggering the deaths of thousands of chickens in Kerinci regency, Kompas.com online news reported on Wed [2 Feb 2011]. Secretary of Animal Husbandry, Division of Kerinci regency, Igor said that at least 4164 chickens were killed due to the disease. "To prevent spreading disease, the Animal Husbandry Division of Kerinci regency is now working hard to supervise people and to spray disinfectant," said Igor. Head of Animal Health, Division of Kerinci regency, Ariyan admitted that there are still many villagers who do not want to destroy their chickens. "However, we keep supervising them," she said.

AVIAN INFLUENZA, POULTRY AND WILD BIRDS (JAPAN): 03 February 2011, The Miyazaki Prefectural Government said Tuesday [1 Feb 2011] that 191 chickens died at a poultry farm in the city of Miyazaki and that 6 of the 7 dead birds tested positive for avian influenza in a preliminary exam. Officials decided to launch more detailed examinations on the 6 dead birds to confirm whether they were infected with bird flu. It would be the prefecture's 7th outbreak. In Tottori Prefecture, meanwhile, officials said the highly virulent strain of the H5N1 virus was detected in 2 wild birds that tested positive for avian flu in earlier tests. The infection, involving a tufted duck and hooded gull found in a weakened state in Yonago last month [January 2011], marks the 2nd outbreak of a highly virulent strain of bird flu in Tottori this winter. No signs of infection have been confirmed so far among the 924,000 chickens at 18 poultry farms within 10 km of where the 2 wild birds were found, the prefectural government said. The Hokkaido government said detailed tests on a dead whooper swan recovered in the town of Hamanaka in mid-January 2011 were positive for the H5N1 virus, the 6th case of a wild bird infected with bird flu in Hokkaido. In Aichi Prefecture, 2 quail farms in Toyohashi resumed shipping quail eggs for the 1st time in 6 days after a ban was put in place on transporting birds and eggs following the outbreak of highly pathogenic avian influenza at a chicken farm there. The prefecture authorized quail farms within a 10-km radius of where the bird flu had broken out to restart egg shipments after confirming the farms had taken measures to prevent infection.

NATIONAL DISEASE REPORTS

CHOLERA (MASSACHUSETTS): 30 January 2011, A 2nd Massachusetts resident has been diagnosed with cholera, and 4 others are suspected of having the intestinal ailment, state disease trackers reported today [28 Jan 2011]. Like the man treated this week at Massachusetts General Hospital for the disease, the other patients attended a lavish wedding at a resort in the Dominican Republic and fell ill upon returning home. All the patients are recovering, and there is no evidence the disease is spreading in Massachusetts, said Dr. Larry Madoff, director of the Division of Epidemiology and Immunization at the Massachusetts Department of Public Health. A young woman complaining of diarrhea, one of the hallmarks of cholera, was treated in the emergency room at Brigham and Women's Hospital earlier this week and given oral rehydration, said Erin McDonough, spokeswoman for the Boston hospital. Preliminary testing found that the woman, who was not identified because of patient confidentiality laws, had cholera. "The physician I spoke with said there is very little concern with cholera cases in the US because of the availability of medications and clean water," McDonough said. "It's unlikely there would be any transmission." A father and his 3 children are suspected of having the bacterial condition, said Madoff, adding that disease specialists are awaiting laboratory tests on at least one member of the family before a firm diagnosis can be made. "We're certainly very suspicious that one or more of the family members may turn out to be positive as well," Madoff said. That family, he said, was "in the same setting where we know everybody else acquired it." That setting was a high-end resort in the Dominican Republic, where more than 400 guests celebrated a wedding last weekend. Dozens, including attendees from Venezuela, the USA, and elsewhere, became sick after returning home. The timing of their symptoms suggests they were infected while in the Dominican Republic. The source of the outbreak is unknown. It has been reported that guests dined on lobster, and shellfish can harbor the germs. But if food is cooked thoroughly, the risk of infection should be mitigated. Cholera most often spreads through tainted water or sewage but can be conveyed by contaminated food. The resort issued a statement saying that while it "deeply regrets the food poisoning/cholera cases that recently occurred during an exclusive wedding party in a private villa residence within our resort," the food, drinks, and ice were provided by an outside catering company hired by the party's hosts. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

UNDIAGNOSED ENCEPHALITIS (BANGLADESH): 05 February 2011, The government on Friday [4 Feb 2011] confirmed the disease as Nipah virus encephalitis that claimed at least 21 people over the last few days in Lalmonirhat and Rangpur. It means inflammation of brain and infected rats [sic; bats] are the carrier of the disease, said doctors at the Institute of Epidemiology Disease Control and Research (IEDCR). They cautioned about drinking raw date juice and about bats, saying rats [sic; bats] usually drink date juice at night. "The laboratory test has confirmed the virus as Nipah," said Prof Mahmudur Rahman, director of the IEDCR. Meanwhile, 4 more people, including a 14-year-old girl, died in an outbreak of encephalitis in northern parts of the country Lalmonirhat and Rangpur Thursday night and Friday [3 and 4 Feb 2011], taking the death toll to 21, report our correspondents in Lalmonirhat and Rangpur. 2 more people -- ages 15 and 2, residents of South Kolkond village in Gangachara upazila, Rangpur -- contracted the disease on Friday [4 Feb 2011]. The IEDCR director said the virus spreads through the saliva, urine and stools of the infected rats [sic; bats]. The latest deceased were identified as a person aged 56, of Baraipara village; a person age 42, of South Goddimari; and a 3rd person age 18, of Gendukuri, village in Hatibandha upazila of Lalmonirhat and a 4th person age 14, of South Kolkan village under in Gangachara upazila of Rangpur. A 3-member medical team led by civil surgeon of Rangpur Rejaul Karim visited the house of one victim in the morning. The residents of Hatibandha and Gangachara upazilas have been terrified with the outbreak of the virus and many of them left their houses. (Viral Encephalitis is listed in category B on the CDC list of critical biological agents) *Non-suspect case

CHOLERA (CANADA): 03 February 2011, The 1st case of cholera in Quebec has been confirmed after the outbreak in Haiti that has killed more than 4000 people since October 2011, but officials were quick to add there was no chance of "retransmission" of the disease. A woman suffering from the disease was admitted in early January 2011 to Ste. Justine Hospital because of severe diarrhea, the Centre hospitalier de l'Universite de Montreal reported. Upon hearing that the woman had recently been in Haiti, the emergency room doctor suspected cholera and had her placed in isolation, as is standard with any patient with severe diarrhea. She was given antibiotics and re-hydrated and released after a few days in hospital. The last recorded case of cholera in Quebec came in 2007. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CHOLERA (VENEZUELA): 31 January 2011, Venezuelan health minister Eugenia Sader said Fri 28 Jan 2011 that 111 people went to the hospital to be checked for cholera, an illness they may have picked up at a wedding in the Dominican Republic. Authorities were still trying to locate the rest of the 452 Venezuelans who traveled to the Dominican Republic for the 22 Jan 2011 wedding. "Our goal is for the 452 people to receive treatment," Sader said in an interview with Telesur network. If all those people are checked, and, if necessary, are treated, then "we will not have an epidemic in Venezuela," she said. Up to now, 37 of those checked by doctors have been confirmed as cases of cholera, and 27 have been hospitalized. Venezuela has had no cholera in a decade. Besides the cholera patients in Caracas, another 12 Venezuelans infected with the bacteria are still in the Dominican Republic. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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